

2003
Virginia Department of Transportation
Daily Traffic Volume Estimates
Including Vehicle Classification Estimates
where available

Special Locality Report
119
Town of Marion

Prepared By
Virginia Department of Transportation
Mobility Management Division

In Cooperation With
U.S. Department of Transportation
Federal Highway Administration

Virginia Department of Transportation
Mobility Management Division
Traffic Monitoring Section

The Virginia Department of Transportation (VDOT) conducts a program where traffic count data are gathered from sensors in or along streets and highways and other sources. From these data, estimates of the average number of vehicles that traveled each segment of road are calculated. VDOT periodically publishes booklets listing these estimates.

One of these booklets, titled “Average Daily Traffic Volumes with Vehicle Classification Data, on Interstate, Arterial and Primary Routes” includes a list of each Interstate and Primary highway segment with the estimated Annual Average Daily Traffic (AADT) for that segment. AADT is the total annual traffic estimate divided by the number of days in the year. This booklet also includes information such as estimates of the percentage of the AADT made up by 6 different vehicle types, ranging from cars to double trailer trucks; estimated Annual Average Weekday Traffic (AAWDT), which is the number of vehicles estimated to have traveled the segment of highway during a 24 hour weekday averaged over the year; as well as Peak Hour and Peak Direction factors used by planners to formulate design criteria.

In addition to the Primary and Interstate publication, one hundred books are published periodically, one for each of 100 areas across the state defined by VDOT for record-keeping purposes. These books include traffic volume estimates for roads within the county, cities, and towns within the area. These books are titled “Daily Traffic Volumes Including Vehicle Classification Estimates, where available; Jurisdiction Report numbers 00 through 99”.

Also available are a number of reports summarizing the average Vehicle Miles Traveled (VMT) in selected jurisdictions and other categories of highways. There are many different ways to present traffic volume summary information. Because the user determines the value of each presentation, the reports have been redesigned based on user requests and feedback. The people at VDOT Mobility Management’s Traffic Monitoring Section who produce these books welcome requests for other helpful ways of presenting the summary information.

A compact disc (CD) is available that includes files in the Adobe® Portable Document Format (PDF) that can be displayed, searched, and printed using common desktop computer equipment. The CD includes the publications described above as well as a number of other reports, including specialized VMT summaries and smaller AADT reports for each city and town separately.

Publication Notes

Parallel Roads

For road inventory and management purposes, some roadways are counted separately by direction and have separately published traffic estimates for each direction of travel. Examples of such roadways are the interstate system and routes with separated facilities and (usually) one-way traffic facilities in urban areas. In these publications, they are referred to as parallel roads. As a convenience for the users of the publication, the listing for segments of roads with parallel segments are published with both the traffic estimates for their own direction of travel (e.g. I-95 Northbound) as well as the estimate of the total of all traffic on the same route including parallel roadways (all directions of I-95). The publication will have a “Combined Traffic Estimates for Parallel Roadways on this Route” or “Combined Traffic” identifiers for the combined direction of travel estimates.

Roadways such as I-395 with a North segment, a South segment and a separate Reversible lane segment will have the estimate for more than two parallel roadways included in the entire combined traffic estimate.

Some routes have very complicated paths through cities and towns. These parallel paths may be too complex to allow a relationship between nearby sections of the opposite direction on the same route. In this case, to indicate that the traffic estimates for such a road segment may not include all directions of traffic on that route, the line that would list the combined values will indicate “NA” for not available.

VDOT’s traffic monitoring program includes more than 100,000 segments of roads and highways ranging from several mile sections of Interstate highways to very short sections of city streets. Due to problems experienced obtaining some traffic count data, and the level of quality necessary to maintain confidence in the data, no estimate is currently available for some segments of roadway. These segments are included in the publications indicating “NA” for not available. It is the intention of the VDOT’s Mobility Management Traffic Monitoring group to obtain the data necessary and to report traffic volume estimates on all road segments included in these publications.

Many of the road segments in this program are local secondary roads. The amount and detail of data collected on these roads are not as great as the data collected on higher volume roads. The vehicle classification, average weekday traffic volumes, and the theoretical design hour traffic volumes are not calculated for these roads. The publications indicate “NA” for the information that is not available.

This publication is based on a traffic monitoring program initiated in 1997. Because the data collection techniques and statistical evaluation processes are different than those used in previous years, comparison with previous publications may be misleading.

Glossary of Terms:

Route: The Route Number assigned to this segment of roadway with the master inventory route number if this is an overlapping route, with official street or highway name if available.

Length: Length of the traffic segment in miles.

AADT: Annual Average Daily Traffic. The estimate of typical daily traffic on a road segment for all days of the week, Sunday through Saturday, over the period of one year.

QA: Quality of AADT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- H Historical Estimate
- M Manual Uncounted Estimate
- N AADT of Similar Neighboring Traffic Link
- O Provided By External Source
- R Raw Traffic Count, Unfactored

4Tire: Percentage of the traffic volume made up of motorcycles, passenger cars, vans and pickup trucks.

Bus: Percentage of the traffic volume made up of busses.

2Axle Truck: Percentage of the traffic volume made up of 2 axle single unit trucks (not including pickups and vans).

3+Axle Truck: Percentage of the traffic volume made up of single unit trucks with three or more axles.

1Trail Truck: Percentage of the traffic volume made up of units with a single trailer.

2Trail Truck: Percentage of the traffic volume made up of units with more than one trailer.

QC: Quality of Classification Data:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- C Short Term Classified Traffic Count Data
- F Factored Short Term Traffic Count Data
- H Historical Estimate
- M Mass Collective Average
- N Classification Estimates of Similar Neighboring Traffic Link

K Factor: The estimate of the portion of the traffic volume traveling during the peak hour or design hour.

QK: Quality of the Peak Hour estimate:

- A Factor based on 30th Highest Hour Observed During at least 250 days of Continuous Traffic Data
- B Factor based on other Hour Observed During Less than 250 days of Continuous Traffic Data
- F Factor based on Highest Hour Collected at in a 48 Hour Weekday Period
- M Factor based on Manual Estimate of design hour
- N Peak Hour Factor of Similar Neighboring Traffic Link
- O Provided by External Source

Dir Factor: The estimate of the portion of the traffic volume traveling in the peak direction during the peak hour..

AAWDT: Average Annual Weekday Traffic. The estimate of typical traffic over the period of one year for the days between Monday through Thursday inclusive.

QW: Quality of AAWDT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- M Manual Uncounted Estimate
- N AAWDT of Similar Neighboring Traffic Link
- O Provided by External Source

Year: Year for which the published values are appropriate. If the Quality of AADT (QA) is "R", the year is the year that the raw traffic count was collected, and if available,

Route Shield Legend

Route Systems

North 	Interstate Route	Traffic volume data for Interstate Routes and some other routes are reported separately by direction, as well as combined.
	US Route	
	Virginia State Route	
	Secondary Route	

Special Routes

Bus 	Bus - Business Route
	Bypas - Bypass Route
	Truck - Truck Route
ALT 	ALT - Alternate Route
	Wve - Wye Route connector
	P - Parallel Route; Southbound or Westbound direction lanes of a numbered route where they are on a different road facility than the other direction.
	The VDOT Maintenance Jurisdiction number is displayed below the Secondary Route Number if the Maintenance Jurisdiction is different than the jurisdiction in the title of the report.

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Annual Average Daily Traffic Volume Estimates By Section of Route
Town of Marion

Route		Length	AADT	QA	4Tire	Bus	Truck-----				QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
							2Axle	3+Axle	1Trail	2Trail							
Town of Marion																	
11	S Main St	0.52	9700	G	From:	WCL Marion				C	0.089	F	0.615	10000	G	2003	
					To:												
11	S Main St	0.40	9800	G	From:	Greenway Ave				F	0.087	F	0.604	10000	G	2003	
					To:												
11	Main St	0.41	10000	G	From:	Anderson St				F	0.081	F	0.511	11000	G	2003	
					To:												
11	Main St	1.19	19000	G	From:	SR 16				C	0.085	F	0.501	20000	G	2003	
					To:												
11	E Main St	0.20	18000	G	From:	SR 16 Commerce St				F	0.082	F	0.523	19000	G	2003	
					To:												
11	Main St	0.04	22000	G	From:	N Main St				F	0.088	F	0.538	24000	G	2003	
					To:	Pendleton St											
11	Main St	0.13	18000	G	From:	Staley St				F	0.084	F	0.502	19000	G	2003	
					To:												
11		0.07	14000	G	From:	Park St				F	0.089	F	0.583	15000	G	2003	
					To:												
11	N Main St	0.41	11000	G	From:	Keller St				C	0.098	F	0.51	12000	G	2003	
					To:	ECL Marion											
16	S Commerce Street	0.05	8800	G	From:	I-81				F	0.091	F	0.582	9300	G	2003	
					To:												
16	S Commerce Street	0.68	8900	G	From:	SR 217				F	0.091	F	0.521	9500	G	2003	
					To:												
16	11 Main St	1.19	19000	G	From:	US 11 Main St				C	0.085	F	0.501	20000	G	2003	
					To:												
16	Park Blvd	1.27	4300	G	From:	US 11 Main St				C	0.091	F	0.594	4600	G	2003	
					To:	NCL Marion											
North 81		0.22	14000	G	From:	WCL Marion				F	0.063	F		15000	G	2003	
					Combined Traffic:	29000	G	77%	1%								1%
North 81		0.27	14000	G	From:	ECL Marion				F	0.063	F		15000	G	2003	
					Combined Traffic:	29000	G	77%	1%								1%
North 81		0.68	14000	G	From:	SR 16				F	0.068	F		14000	G	2003	
					Combined Traffic:	30000	G	77%	1%								1%
South 81		0.22	15000	G	From:	NCL Marion				F	0.086	F		15000	G	2003	
					Combined Traffic:	29000	G	77%	1%								1%
South 81		0.90	15000	G	From:	ECL Marion				F	0.086	F		15000	G	2003	
					Combined Traffic:	29000	G	77%	1%								1%
South 81		0.37	16000	G	From:	SR 16				F	0.078	F		16000	G	2003	
					Combined Traffic:	30000	G	77%	1%								1%
217		2.20	1100	G	From:	Dead End				C	0.158	F	0.827	1200	G	2003	
					To:	SR 16											

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						2Axle	3+Axle	1Trail	2Trail							
Town of Marion																
① N. Church St	0.22	NA		From:	Lee Street						NA			NA		
				To:	Catron Street											
② Rte 645 Fowler St	0.02	1100	G	From:	98%	0%	2%	0%	0%	C	0.103	F	0.504	1100	G	2003
				To:	Chatham Hill Cir											
③ Pendleton St	0.11	NA		From:	Commerce St						NA			NA		
				To:	E Main St											
④④⑤② Poston St	0.39	370	G	From:	98%	0%	1%	1%	1%	F	0.110	F	0.758	400	G	2003
				To:	W Cherry St											
④④⑤② E Cherry St	0.21	3400	G	From:	98%	0%	1%	1%	1%	C	0.100	F	0.594	3600	G	2003
				To:	SR 16 Commerce St											
④④⑤③ S Church St	0.77	2600	G	From:	98%	0%	1%	1%	1%	F	0.09	F	0.555	2700	G	2003
				To:	US 11; E Main St											
④④⑤③ N Church St	0.11	1500	G	From:	98%	0%	1%	0%	1%	C	0.107	F	0.585	1600	G	2003
				To:	Lee St											
④④⑤③ Lee St	0.31	1500	G	From:	96%	0%	2%	1%	1%	C	0.103	F	0.595	1500	G	2003
				To:	US 11; N Main St											
④④⑤③ Chatham Hill Rd	0.15	4900	G	From:	96%	1%	1%	1%	1%	F	0.093	F	0.804	5200	G	2003
				To:	Chilhowie St											
④④⑤③ Chatham Hill Rd	1.16	2400	G	From:	96%	1%	1%	1%	1%	C	0.093	F	0.589	2500	G	2003
				To:	NCL Marion											
④④⑤④ Chilhowie St	0.96	1900	G	From:	97%	0%	1%	0%	1%	C	0.09	F	0.514	2000	G	2003
				To:	Chatham Hill Cir											
④④⑤④ Chilhowie St	0.14	1900	G	From:	98%	0%	1%	0%	0%	F	0.122	F	0.946	2000	G	2003
				To:	Main St											
④④⑤⑨ Keller La	0.70	1400	G	From:	98%	0%	1%	0%	0%	C	0.105	F	0.537	1500	G	2003
				To:	NCL Marion											
④④⑥① Johnston Rd	0.15	2500	G	From:	93%	0%	2%	2%	2%	C	0.132	F	0.731	2700	G	2003
				To:	US 11 Main St											
1st Street		400	G	From:	Look Ave						0.109	F		420	G	2003
				To:	Lincoln Ave											
Catron St		310	G	From:	Sprinkle Ave						0.118	F	0.65	330	G	2003
				To:	Wolfe Ave											
Catron St		600	G	From:	Prescott Ave						0.107	F	0.586	630	G	2003
				To:	Chilhowie St											
Cumberland St		380	G	From:	Clinton Ave						0.087	F	0.528	400	G	2003
				To:	Hulldale Ave											
Dalton St		260	G	From:	Hulldale Ave						0.098	F	0.571	280	G	2003
				To:	Greenway St											
Dogwood Dr		130	G	From:	Magnolia St						0.12	F	0.636	130	G	2003
				To:	Dead End											

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						2Axle	3+Axle	1Trail	2Trail								
Town of Marion																	
E. Main St		1600	G	From:	Action Pl						0.106	F	0.757	1600	G	2003	
				To:	Oak St												
Hulldale Ave		100	G	From:	Cumberland St						0.177	F	0.539	110	G	2003	
				To:	Dead End												
Look Ave		490	G	From:	1St Street						0.108	F	0.5	520	G	2003	
				To:	Chilhowie St												
Magnolia St		220	G	From:	Dogwood Dr						0.146	F	0.507	240	G	2003	
				To:	Hemlock St												
Magnolia St		260	G	From:							0.13	F	0.583	270	G	2003	
				To:	Veteran St												
Mt View Dr		80	G	From:	Golf View						NA			90	G	2003	
				To:	Country Club Rd												
Park St		470	G	From:	Cherry St						0.09	F	0.544	500	G	2003	
				To:	Dead End S Of Cherry												
Patton Ave		80	G	From:	Cumberland St						0.127	F	0.565	90	G	2003	
				To:	Dead End												
Pearl St		670	G	From:	E. Cherry St						0.100	F	0.635	710	G	2003	
				To:	E. Hiigh St												
Pendleton St		NA		From:	Main St						NA			NA			
				To:	Commerce St												
S. Iron St		1100	G	From:	E. High St						0.099	F	0.513	1100	G	2003	
				To:	Walnut St												
Wassona Dr		1600	G	From:	95%	0%	0%	3%	1%	0%	C	NA		1700	G	2003	
				To:	Hemlock St												
Wassona Dr		1900	G	From:	98%	0%	1%	0%	1%	0%	C	0.1	F	0.505	2100	G	2003
				To:	Veteran St												
Wolfe Ave		240	G	From:	Oakley St						0.142	F	0.527	250	G	2003	
				To:	Dover St												